REMARKS

The Examiner rejected claims 29-46 under 35 U.S.C. §102(e) as being anticipated by Brisbee. The rejected claims include two independent claims – claims 29 and 41. Both are directed to a two-stage method of time stamping a document. Claim 29 relates to the first stage in which an outside agency generates a message authentication code (MAC) based on a time stamp receipt and a secret key. Claim 41 is directed to the second stage in which the outside agency validates the MAC and, if the MAC is valid, certifies the time stamp receipt by cryptographically signing the time stamp receipt using the secret key. Notably, the claimed MAC is a one-way hash function that includes the secret key. It is a key-dependent function of both the uncertified time stamp receipt and a secret key. In other words, the outside agency uses the secret key as input to a function to generate the MAC. The specification provides some examples of how the outside agency might generate the MAC. *Spec.*, p. 7, ln. 21 – p. 9, ln. 10.

Brisbee does not disclose a MAC, nor does Brisbee ever mention using a secret key as input to a function to generate a MAC. Rather, Brisbee discloses two methods by which a trusted agency (i.e., the TCU) re-validates previously authenticated documents (i.e., e-originals) to extend their validity period. *Brisbee*, ¶ [0087]. The first method is termed "digital signature chaining," and involves computing a hash value of the e-original. If the TCU deems the e-original to be valid, the TCU appends a date-time stamp and a TCU cryptographic signature to the e-original. *Brisbee*, ¶ [0105]. The second method is termed "object inventory versioning," and involves creating and maintaining a plurality of related e-originals that have already been authenticated. *Brisbee*, ¶ [0092]. In this method, Brisbee teaches linking each related e-original to an "e-original reference object" that comprises references to each e-original. Upon re-validation, the TCU appends a date-time stamp and a digital signature to the reference object. *Brisbee*, ¶ [0105]. Appending date-time stamps and digital signatures to re-validate documents

that have already been authenticated does not teach using a secret key is used as input into a hash function to generate a MAC.

It is noted that Brisbee may compute a hash value of the e-original during the re-validation process to determine whether the e-original remains valid. The contents of the e-original over which Brisbee computes the hash include the document and the author's digital signature. However, Brisbee does not use this signature as input into a hash function as required by the claims. Rather, Brisbee simply hashes these signatures along with the document. The TCU's digital signature is always appended to the end of a re-validated e-original in Brisbee. "[T]he hash is computed over the e-original contents up to, but not including, the TCU outermost digital signature." *Brisbee*, ¶ [0089] (emphasis added).

The TCU of Brisbee does not generate a MAC as required by claim 29. Because Brisbee does not generate a MAC, Brisbee necessarily fails to teach validating a MAC as required by claim 41. Accordingly, Brisbee does not anticipate any of claims 29-46 under §102.

Finally, Applicant adds new claims 51 and 52 for consideration by the Examiner. No new matter has been added. Claims 51-52 depend directly from claims 29 and 41, respectively, and make explicit what is already implicit. Particularly, claims 51-52 further recite that the secret key used to generate the MAC at the outside agency (claim 51) and validate the MAC at the outside agency (claim 52) comprises the outside agency's secret key. As stated above, Brisbee explicitly excludes any hashing of the TCU's digitial signature. *Brisbee*, ¶ [0089]. Accordingly, claims 51 and 52 are patentable over Brisbee.

In light of the above amendments and accompanying remarks, Applicants respectfully request allowance of all pending claims.

Respectfully submitted,

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